

REMARKS

This Amendment is in response to the Office Action mailed May 31, 2006. With this Amendment, the title is amended, claim 1 is amended and the remaining claims are unchanged. Reconsideration and withdrawal of the rejections are respectfully requested in view of the following remarks.

In the Office Action, the Examiner objected to the title. With this Amendment, the title is amended to include reference to a compressed speech lexicon. With this Amendment, the Applicant believes that the Examiner's rejection has been overcome. Reconsideration and withdrawal of the objection are respectfully requested.

In the amendments presented in the RCE filed on May 16, 2006, the Applicant amended a number of claims to include the limitation, in the preamble, of a method of building a compressed speech lexicon for use in a speech application, or a compressed speech lexicon for use in a speech application. The Examiner indicated that this amendment does not have patentable weight. However, the Examiner appears to be focused on the phrase "for use in a speech application" as opposed to the limitation of "a compressed speech lexicon." This position of the Examiner is contradictory in view of the acceptance of similar language in claim 12. The only difference is the use phrase found in claims 1-11, and 27-31. The Applicant asserts that a compressed speech lexicon defines the claimed lexicon to be used in a speech application, and therefore, the Examiner should consider the language as properly framing the subject matter which the Applicant claims as the invention.

In the Office Action, the Examiner rejected claims 1-11 and 27-31 under 35 USC§103(a) as being unpatentable over Burrows (6021409) in view of Sarukkai et al. (5819220). The Examiner asserted that Burrows teaches all of the elements of the claims. However, the Examiner asserted that Burrows does not explicitly teach the use of the word techniques in a speech related application. The Examiner then asserted that Sarukkai teaches using word list techniques in a web based speech application. Then, the Examiner asserted that it would have been obvious to one of ordinary skill in the art of internet portals to adapt the teachings of Burrows into speech related web applications because it would advantageously tailor the speech

enabled sites to specific vocabularies. The Applicant has reviewed the references and must respectfully disagree.

In the rejection of claims 1 and 27, the Office Action provided various citations to the Burrows patent. After reviewing the Burrows patent, the Applicant offers the following observations regarding the disclosure of the Burrows patent as applied to the present invention, and in particular claim 1.

The Examiner indicated that the element “receiving a word list and word-dependent data associated with each word in the word list” is disclosed by receiving a word list from the parsing module containing words as well as their contents in column 6 lines 60-67 of the Burrows reference. In the section cited by the Examiner, it is stated:

The parsing module 30, in a collating order of the sequential locations of the content, breaks the information of the pages 200 down into discrete indexable elements or individual "words" 300. Each word 300 is separated from adjacent words by a word separator 210 indicated by a circle. In the index 70 each word is stored as a "literal" or character based value. It should be understood, that the terms page 200, word 300, and separator 210 are used to represent many different possible content modalities and data record specifications.”

While Burrows discusses “words” in the cited section, there is no mention of word-dependent data, let alone word-dependent data configured for use in a speech application. The present Specification defines word-dependent data as that being useful in a compound lexicon in a speech recognition or speech synthesis context. See page 14, lines 20-28. Therefore, it is believed that the Burrows reference does not disclose this element of claim 1.

The Examiner indicated that the element of “selecting a word from the word list” in claim 1 is disclosed “as choosing the word” in column 11, lines 14-16 of the Burrows reference. The cited section states, “In order to prepare the pairs 400 to be indexed, the pairs are sorted first in word order, and second in location order.” Nowhere in the cited section is it disclosed that a

word is selected. This is simply ordering words and not selecting a given word. Therefore, it is believed that this element is not disclosed by the Burrows reference.

The Examiner indicated that the element “generating an index entry identifying a location in a lexicon memory for holding the selected word” in claim 1 was disclosed in Burrows at column 11 lines 4-7. The cited section of the reference states: “As stated above, the indexing module 40 generates an index 70 of the content of the records or pages 200. The internal data structures 71-73 of the index 70 are now described first with reference to FIG. 6.” This is an index of the content of a page, and not an index entry identifying a location in a lexicon memory holding the selected word. Further review of the Burrows reference indicates that this index includes each occurrence of the word in a text document and each occurrence is stored separately. However, a text document is not a speech lexicon memory for speech applications. Therefore, it is believed that this element is not disclosed by Burrows.

The Examiner indicated that “encoding the selected word and its associated word-dependent data” in claim 1 was disclosed on column 12 lines 50-63 and column 14 lines 48-55. The Applicant has reviewed the cited sections and these sections only mention various types of encoding (binary encoding, for example), but do not disclose what is encoded. The present invention encodes both the word and word-dependent data, which are not disclosed by Burrows. Therefore, it is believed that this element cannot be disclosed by Burrows.

The Examiner continues the assertion that the Burrows reference is an acceptable primary reference to use in the §103 rejections. As discussed, Burrows discloses a method of parsing and indexing a web page. However, this is completely different from the present invention. In fact, the only mention of the internet in the present application occurs with respect to FIG. 1 that describes general computing environments.

The Applicant has argued that the teachings of the Burrows reference have no relation to the present invention. In particular, there are fundamental differences between a speech lexicon and any other “lexicon” like structure. For example, a speech lexicon contains information related to the pronunciation and/or recognition of a spoken word. This information is clearly lacking from the Burrows reference. Further, the Burrows reference makes no mention of word-

dependent data. Burrows treats items that are not words, but information, such as metawords, as separate words and these are indexed along with words. Thus, the Burrows reference does not disclose anything related to a speech lexicon, nor does it disclose word-dependent data.

As a second basis for the rejection, the Examiner states that one of ordinary skill in speech applications would look to the Sarukkai reference to account for the shortcomings of the Burrows reference. The Sarukkai reference is directed to a computer system for user provided speech actuation and access to stored information. A speech recognition processor operating on the computer system recognizes words based on the input speech utterances of the user in accordance with a set of language/acoustic models and speech recognition search parameters. Software running on the CPU scans a document accessed by a web browser to form a web triggered word set from a selected subset of information in the document. The language/acoustic model and speech recognition search parameters are modified dynamically using the web triggered word set, and used by the speech recognition processor for generating a word string for input to the browser to initiate a change in the information accessed. Sarukkai, describes the basics of speech recognition, and a method for dealing with out of context words. However, The Sarukkai reference relates to speech recognition and web applications, and has nothing whatsoever to do with generating a compressed speech lexicon for use in a speech application. Therefore, the applicant asserts that the Sarukkai reference is also inapplicable to the present set of claims.

In item 5 of the Office Action the Examiner rejected claims 12-18 and 23-26 under 35 USC §103(a) as being unpatentable over Burrows in view of Sarukkai. Based on the comments in the rejection, the Applicant assumes this was a typographical error and the rejection was intended to be Burrows in view of Pringle et al., US Patent No. 6,470,306. The Applicant has reviewed the cited references and must respectfully disagree.

The Pringle reference is directed towards a method and apparatus for translating a document from one language to another language. The Pringle reference does not disclose anything related to a speech application or a compressed speech lexicon. In fact the process disclosed in Pringle would not be an acceptable process for use on a speech lexicon.

If one were to combine the references cited by the Examiner the combined result would not be the present claims. The combined result could be a compressed lexicon, but it can not be a compressed speech lexicon, as it lacks, at a minimum, the fundamental features required for a speech lexicon. Therefore, it is respectfully submitted that claims 12-18, and 23-26 are allowable over the cited references. Reconsideration and withdrawal of the rejections are respectfully requested.

The Applicant further submits that claims 1-31 are non-obvious in view of the cited references because there is no motivation or suggestion to combine them. The Federal Circuit has held that rejecting patents solely by finding prior art corollaries for the claimed elements would permit an Examiner to use a claimed invention itself as a blueprint for piecing together elements in the prior art to defeat the patentability of the claimed invention, which would be "an illogical and inappropriate process by which to determine patentability." *In re Rouffet*, 149 F.3d 1350, 1357 (Fed. Cir. 1998) (citing *Sensonics, Inc. v. Aerosonic Corp.*, 81 F.3d 1566, 1570, 38 USPQ.2d 1551, 1554 (Fed. Cir. 1996)). Even seemingly simple changes require a finding of a suggestion in the prior art to make the modification to avoid the improper use of hindsight.


Applicant simply believes that the standard used by the Examiner for combining references is incorrect and does not follow the current standard as set forth clearly by the Federal Circuit in *In re Lee*, 61 USPQ 2d 1430 (Fed. Cir. 2002). The Court of Lee held that a factual inquiry on whether to combine references must be based on objective evidence of record, which has been reinforced in a number of decisions. *In re Lee* at 1433, citing *McGinley v. Franklin Sports, Inc.*, 60 USPQ 2d 1001, 1008 (Fed Cir. 2001) and *Brown & Williamson Tobacco Corp. v. Phillip Morris Inc.*, 56 USPQ 2d 1456, 1459 (Fed. Cir. 2000). Therefore, the Applicant asserts that there is no motivation to combine the references.

In conclusion, it is respectfully submitted that claims 1-31 are allowable over the cited references whether taken singly or in combination. Reconsideration and allowance of claims 1-31 are respectfully requested.

The Director is authorized to charge any fee deficiency required by this paper or credit any overpayment to Deposit Account No. 23-1123.

Respectfully submitted,

WESTMAN, CHAMPLIN & KELLY, P.A.

By: 
Nathan M. Rau, Reg. No. 45,466
900 Second Avenue South, Suite 1400
Minneapolis, Minnesota 55402-3244
Phone: (612) 334-3222 Fax: (612) 334-3312

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